ThinkCentre® M77 Small (2227) - TopSeller

	Type-model	Slot x bay		GHz	Memory ⁸	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display- Port dongle	Chassis intr switch		Floor stand	ENERGY STAR 5.2		
	2227-A1U	4x3	Athlon II X4 645	3.1	4GBx1	500G 7200	DVD±RW	None	HD 4250	None	None	None	Stand	None	ΝN	Pro 64
	2227-A2U	4x3	Athlon II X2 B24	3.0	2GBx1	320G 7200	DVD±RW	None	HD 4250	None	None	None	Stand	None	ΝN	Pro 64
	2227-A3U	4x3	Phenom II X2 B53	2.8	4GBx1	320G 7200	DVD±RW	None	HD 4250	None	None	None	Stand	None	ΝN	Pro 64
rs	2227-A4U	4x3	FX 4100	3.6	4GBx1	500G 7200	DVD±RW	None	HD 4250	None	None	None	Stand	None	ΝN	Pro 64

- Small and medium business (SMB) model(s), part of the US TopSeller Program
- •3-year limited warranty
- Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning	Mainstream enterprise stability and manageability	Preloaded operating system				
Processor	AMD Athlon™ II X2 Processor B24 with dual-core, integrated 1066MHz DDR3 memory controller, and 2MB L2 cache (1MB per core) AMD Phenom™ II X2 Processor B53 with dual-core,	Genuine Windows® 7 Professional 64 Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Norton™ Internet Security 2011 (30 days of virus definitions)				
	integrated 1066MHz DDR3 memory controller, 1MB L2 cache (512KB per core), and 6MB shared L3 cache AMD Athlon II X4 Processor 645 with quad-core, integrated 1333MHz DDR3 memory controller, and 2MB L2 cache (512KB per core) AMD FX™ Processor 4100 with quad-core, Turbo Core 2.0 (3.8GHz max) integrated 1866MHz DDR3 memory controller, 4MB L2 cache (1MB per core), and 8MB shared L3 cache					
Implementation	Processor in Socket AM3+ 16GB max, UDIMM, PC3-10600 1333MHz DDR3, four 240-pin DIMM sockets	Adobe® Reader® Skype™ for Windows				
Memory Graphics	ATI™ Radeon™ HD 4250, integrated in chipset, uses main memory, one analog VGA DB-15 connector, one DisplayPort™ connector, HDCP, DirectX® 10.1, ATI Avivo™, SurroundView™, supports dual independent display; supports up to 4 monitors with opt dual-head ATI Radeon discrete graphics adapter; <i>Maximum resolution:</i> 2560x1440 (VGA) @ 75Hz; 2560x1600 (DisplayPort) @ 60Hz	Windows Live™ Essentials Windows Live™ Essentials				
DP dongle	None					
Disk Optical SATA controller SATA cables eSATA port Media reader	SATA 6.0Gb/s 7200 rpm Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1 Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar None None					
Chipset	AMD 980G Chipset	_				
Front ports Rear ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm) Six USB 2.0, serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2), ethernet (RJ-45), VGA DB-15, DisplayPort					
Rear audio ports Internal connector Audio Speaker IEEE 1394 Ethernet Modem	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm) Three USB 2.0 planar conn (1 used; two open for additional USB devices) High Definition (HD) Audio, Realtek® ALC662 codec Internal speaker for business audio None One gigabit ethernet port, Broadcom® BCM5761, DASH 1.1 None					
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant					
Keyboard Mouse Floor Stand Power supply	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo Enhanced Optical USB Mouse, 1000 dpi, black, Lenovo logo System floor stand for vertical orientation 240 watts, autosensing, active Power Factor Correction					
Machine	Business black color; metal case 13.3" W X 14.5" D X 3.9" H 337mm W X 369mm D X 99mm H 16.5 lb (7.5 kg) in maximum configuration Toolless cover flips up and tilts backward on rear hinges Toolless disk and optical drive removal Toolless adapter retention	Security Security chip (see information on left) Security slot (in rear for attachment of optional Kensington® MicroSaver®				
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader	cable) • Power-on password • Administrator password				
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1 Slot 4: Low Profile, 32-bit PCI 2.3	Hard disk password Boot sequence control Boot without keyboard and mouse Individual USB port disablement				
	•	RoHS-compliant				
		Supports ThinkVantage Technologies For compatible accessories, please go to O-M77 sheet;				
Limited Warranty	3-years , limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	For ThinkPlus™ service upgrade options, please go to S-TC sheet				